



# ORIGINAL CLAIMS (AMENDMENT A MARKINGS)

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I Claim:

~~1. A coriolis inertial oscillator consisting of an orbiting mass with radial motion~~

~~on a moveable platform, said mass rotating at a regulated constant angular velocity, from a regulation system, motor flywheel, via sliding rigid coupling, the platform constrained to move linearly in a vertical channel parallel to the earth's gravitational field, the channel housed~~

~~in a rigid frame attached to a payload at the bottom, the oscillating channel is~~

~~clutched to the frame via a member when the forces are upward and not exceeding 90 degrees in each~~

~~rotation with repositioning of the platform from a spring crank mechanism.~~

~~2. A system as claimed in 1., where the mechanical clutch is a toggle clamp engaging a~~

~~grooved member held by a back plate~~

~~3. A system as claimed in 1, where the mechanical clutch is a eccentric cam with lever arm~~

~~engaging a grooved member with spring release~~

~~4. A system as claimed in 1 where the mechanical clutch is ball in an inclined plane with spring~~

~~release of ball via slotted lever~~

~~5. A system as claimed in 1 where the mechanical clutch is a cam buckle acting on a nylon webbing~~

~~material member in tension with the frame.~~

~~6. A system as claimed in 1 where the rotor mass is a satellite mass fixed to a planet gear via arm~~

~~which revolves around a fixed sun gear~~

~~7. As claimed in 4 where the distances between the rotor, planet and sun gear are equal~~

~~8. As claimed in 3 where the satellite mass is zero and the planet gear revolves about the sun~~

~~with equal mass.~~

ORIGINAL CLAIMS

# CLAIMS - ORIGINAL (AMENDMENT A MARKINGS)

CURRENTLY 7  
AMENDED 1A  
9. A system as claimed in 1 where the platform mass is twice the weight of the combined satellite planet gear and rotor,

CUR: 1B 10. A system as claimed in 1. where the flywheel is replaced with a mechanical governor

AM. 8  
CUR 11. A system as claimed in 1 where the motor is an induction motor with variable frequency speed control

CUR. 10 12. A system as claimed in 1 where the motor is a rotary wankel engine

AM. 9 13. A system as claimed in 1 where the motor is a DC electric motor, ~~powered from a fuel cell.~~

CUR. 11 14. A system as claimed in 1 where the slide coupler is a splined shaft with sliding worm engaging a worm gear set to drive rotors.

CUR. 1B-a 15. A system as claimed in 1 where the slide coupler is an oldham coupler connecting the drive source with the oscillator axle

CURRENT 12 16. A system as claimed in 1 comprising multiple oscillators with at least two coaxially coupled by a common oldham coupler, each being clocked 180 degrees apart on independent platforms, driven by the motor oldham coupler, to provide zero transverse forces

CUR. 1B-c 17. A system as claimed in 16 with four oscillators clocked 90 degrees apart, each independently oscillating from common oldham couple motor drive source.

CUR. 14 18. A system as claimed in 16 where the spring-crank repositioning device is driven by a chain drive and sprocket arrangement off a sprocket of equal size rotatably connected to the oldham..

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CURRENT AMENDED CLAIMS (A)  
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I claim:

LINE

- Currently*  
*AMENDED*
1. A method for an inertial oscillator control system comprising
- A. a near vertical lifting system for heavy gravity payloads in a first embodiment:
- a) utilizing the compound action of coriolis-centrifugal forces in a three body variable radius oscillator ,
  - b) torque supply source comprising sliding gear arrangement
  - c) moveable platform that carries force generating bodies rotating about respective axles,
  - d) coupling and release of platform with rigid load rod connected to frame for angular durations less than 90 degrees of planet rotor,
  - e) while maintaining constant angular velocity of of rotor bodies by a regulation system,
  - f) maintaining an elevation position of platform in gravity field using spring-crank mechanism, and
  - g) vectoring platform-frame off from vertical to obtain horizontal motion of payload,
  - h) and a motor drive source of high torque design.
- Currently*  
*Amended*
- B. a near vertical lift system for gravity payload in a second embodiment,

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- 1
- Current Amend* a) a rotary torque source using an oldham  
coupler, 2
- New* b) driving a two body oscillator consisting  
of a platform with single rotor, 3
- Current amend* c) in a coaxial arrangement of multiple oscillators  
with each rotor, <sup>PAIR</sup> clocked 180 degrees apart from  
each other, 4
- New* d) that co-rotate in one direction to provide a net  
gyroscopic moment to stabilize vehicle once in  
the air, 5
- Current amend* e) a heavy duty clutching system using ~~a cam buckle~~ <sup>MEANS</sup>  
~~acting on nylon webbing~~ <sup>load member</sup> in tension connection  
with the frame, 6
- Current Amend* f) a speed regulation design using a mechanical  
governor 7
- New* g) and a motor source with high torque. 8
- but otherwise having the same controls as the 1st embodiment. 9
- currently Amended* 2. A system as in claim 1 where the mechanical clutch is a  
toggle clamp acting on a grooved load rod with backup plate and  
activated by rotary cam engaging a follower on toggle arm and  
release from a second rotating pin on separate axis. 10
- currently Amended* 3. A system as in claim 1 with a mechanical clutch using a  
cam buckle acting on a nylon webbing in tension with the frame. 11

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4. A system as in claim 1A, where the rotor mass is a satellite mass fixed to a planet gear via arm which revolves around a fixed sun gear via axle connected to gear drive
5. A system as in claim 1A where the distances between the respective masses are equal.
6. A system and in claim 1A where the satellite mass is zero and the just the planet rotor revolves about the sun gear axle.
7. A system as in claim 1A where the platform mass is equal to twice the mass sum of the planet and satellite rotors.
8. A system as in claim 1A where the motor is an AC induction motor.
9. A system as in claim 1A where the motor is a DC electric motor.
10. A system as in claim 1B where the motor is a rotary wankel engine.
11. A system as in claim 1A where the drive is a splined shaft with slidable worm acting on worm gears to drive rotors.
12. A system as in claim 1A where at least two oscillator units are paired in a frame to provide zero transverse forces and multiple pulses of thrust per rotation.
13. A system as in claim 1 where the frame is mounted above the payload in gimbal fashion to permit vectoring for horizontal thrust.
14. A system as in claim 1B where the drive is a pair of chain sprockets clocked in synchronous operation with the motor and crank spring reset system and rotor main drive axle.

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